

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A fluid cooled wet brake system comprising:

a sealed housing containing a lubricating liquid;

a disc disposed in the housing and adapted for fixing to a rotating body projecting into the housing, the disc having first and second opposite planar surfaces;

friction material attached to the first planar surface;

a first stator slidably mounted and rotationally fixed within the housing and having a first braking surface facing the first planar surface, the first stator provided with a fluid inlet, a fluid outlet, and one or more internal fluid flow paths extending between the fluid inlet and the fluid outlet through which a cooling fluid flows; and,

an actuator for selectively applying a force on the first stator to slide the first stator towards the disc and hold the braking surface against the friction material.

2. (Currently Amended) The wet brake system according to Claim 1, further comprising a second stator having a second braking surface facing the second planar surface and wherein the friction material is attached to the second planar surface, with the second braking surface facing the friction material on the second planar surface, and wherein the actuator selectively applies force on the second stator to slide the second stator toward the disc and hold the second braking surface against the friction material on the second planar surface.

3. (Currently Amended) The wet brake system according to ~~Claim 1 or 2~~ wherein each stator is provided with a plurality of parallel fluid flow paths that extend between the fluid inlet and the fluid outlet.

4. (Currently Amended) The wet brake system according to ~~Claim 1~~ wherein each stator comprises a first annular plate provided with a plurality of channels on one side, and a second annular plate attached to the one side for covering the channels wherein the covered channels form the internal fluid flow paths.

5. (Currently Amended) The wet brake system according to ~~anyone of Claims 1 to 4~~ claim 1, further comprising a mechanism that slidably couples each stator to said ~~the~~ housing.

6. (Currently Amended) The wet brake system according to ~~anyone of Claims 1 to 5~~ claim 1 wherein the friction material is in the form of one or more pads of ~~fraction~~ friction material detachably coupled to the disc.

7. (Currently Amended) The wet brake system according to ~~Claim 1~~ claim 6 wherein the pads are circumferentially spaced apart about the disc.

8. (Currently Amended) The wet brake system according to ~~Claim 1~~ claim 6 or 7 wherein each pad is provided with grooves on its surface, where each groove opens at its opposite ends onto an edge of the pad.

9. (Currently Amended) The wet brake system according to ~~anyone of Claims 1 to 8~~ claim 1 wherein the braking surfaces are provided with grooves which extend between, and open at their opposite ends, onto respective inner and outer edges of the braking surface.

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Preliminary Amendment

10. (Currently Amended) The wet brake system according to ~~Claim~~
claim 8 or 9 wherein the grooves follow a spiroidal curve.